Section 99b - Educator PD for Computer Science (CS) and Computational Thinking (CT)

Grant Overview

As prescribed in Section 99b of the <u>State School Aid Act</u>, the Michigan Department of Education (MDE), Educational Technology unit, is launching a competitive grant only for districts to develop and implement teacher professional development programs for computer science courses and content that will reach new and existing teachers with little to no computer science background. Districts may also choose to participate in professional development around the integration of computational thinking strategies, which increases usage of higher order thinking skills in all content areas, including computer science.

Computer science is an academic discipline of the study of computers and computing processes including social and ethical questions about using computers.

Computational thinking is a problem solving process that includes strategies for solving complex problems that work across the curriculum and help students develop higher order thinking skills. The four strategies for solving any problem include abstraction, algorithmic thinking, decomposition, and pattern recognition.

To be eligible to receive funding under this section, the district's application must, at a minimum, address how the district will do all of the following:

- Reach new and existing teachers with little to no computer science background.
- Use research- or evidence-based practices for high-quality professional learning.
- Focus the professional learning on the mastery of all areas of <u>computer science</u> standards as approved by the state board of education in 2019.
- Reach and support marginalized racial and ethnic groups underrepresented in computer science.
- Provide teachers with concrete experience with hands-on, inquiry-based practices.
- Accommodate the particular teacher and student needs in each district and school.
- Ensure that participating districts shall begin offering the courses or content within the same or next school year after the teacher receives the professional learning.
- Commit to completing the SCRIPT process.

Grant awardees will be required to apply for funding through NexSys.

Total funds available = \$4,000,000.

Grant Program Goals

The intent of the 99b funding may be used only for the following purposes:

- High-quality professional learning for K to 12 computer science content. The costs
 associated with professional learning as described in this subdivision include, but are not
 limited to, travel to workshops. As used in this subdivision, "high-quality professional
 learning" means learning that is sustained, intensive, collaborative, job embedded, data
 driven, and classroom focused.
- Supports for K to 12 computer science professional learning, including, but not limited to, mentoring and coaching.
- Creation of resources to support implementation.
- Professional learning offerings that identify strategies to include underrepresented groups.
- Participation in the Strategic CSforALL Resource and Implementation Planning Tool (SCRIPT) process with a trained facilitator of this state.

Grant Timeline

Applications available: TBD Applications due: TBD

Award Period: October 1, 2023 - September 30, 2025

Funding Amounts

Not to exceed \$200,000 per district

Activities Supported With Grant Funds

Examples of allowable fund expenditures include, but are not limited to:

- Professional development related to Computational Thinking or Computer Science
 - Travel including airfare, mileage, hotel, other necessary charges
 - Professional organization membership related to grant activities
 - Conference participation related to grant activities
- Substitute teacher costs for Computational Thinking/Computer Science planning meetings if during contract hours
- Stipends for Computational Thinking/Computer Science planning meetings if outside of contract hours
- Meeting costs/supplies related to grant activity

^{*}Dates are subject to change

- Costs to support mentoring and coaching of staff related to Computational Thinking or Computer Science
- Other activities approved by MDE Educational Technology consultants

Unallowable expenses:

- Costs of entertainment, including amusement, diversion, and social activities
- Costs of alcoholic beverages are unallowable
- Costs of meals above district per diem rate
- Costs for training not directly related to the implementation of Computational Thinking or Computer Science
- Costs of mentoring and coaching of staff that is NOT related to Computational Thinking or Computer Science
- Costs associated with salary and benefits for a teacher to teach CS or CT to students
- Computer hardware

For more information or support, please contact MDE-Edtech@michigan.gov.

Selection of Award Recipients

The MDE utilizes a review panel when scoring its grants. For this grant program, review teams will be composed of people from within and outside the MDE as needed, with expertise in Computational Thinking and Computer Science. A project rubric has been provided and must be addressed in the application narrative and budget. The reviewers will judge the application proposal against the elements described in the rubric. The MDE, Office of Systems, Evaluation, and Technology, Education Technology Unit staff will conduct an administrative review and will supervise the external review process.

The number of grants recommended for awards will be influenced, among other factors, by availability of funds, the quality of proposals submitted, locale, and the size of the final budget requested for each project. Applicants may receive only a portion of their proposed amount.

The MDE reserves the right to reject any applications received late or incomplete as a result of this grant program announcement.

Grant Criteria and Rubric (competitive)

The application must address all the following to be considered complete for review:

1. Application must identify content to be addressed in the following areas:

- a. Need Please address your statement of need around this work.
- b. Steps Taken to Prepare Please share how the district prepared to develop and implement teacher professional development programs for computer science and computational thinking courses and content for new and existing teachers with little to no CS/CT background.
- c. Capacity Describe the capacity of the district to develop and implement teacher professional development programs for computer science and computational thinking courses and content for new and existing teachers with little to no CS/CT background.
- d. Sustainability Describe how this work will be sustained without future grant funding
- e. Underrepresented groups How does this work reach and support marginalized racial and ethnic groups underrepresented in computer science?
- f. Budget (see limitation in Funding Amounts)
- 2. Proposals must be submitted through the NexSys grant application system

REVIEWERS WILL NOT CONTINUE PROPOSAL ASSESSMENT IF THESE CRITERIA ARE NOT MET.

Grant Review Criteria

Section	Criteria	Points
	Part A: Project Narrative (3000 characters)	
A1	A1 Evidence of need is clear and supported by references to recent, valid, targeted data.	
A2	A2 Description of why this work is important for your district and how the activities will support your continuous improvement goals.	
	Part B: StepsTaken to Prepare (1500 characters)	
B1	Description of how the implementation area was identified.	
B2	B2 Timeline of district implementation.	
	Part C: Capacity (2000 characters)	
C1	Staff roles within project identified	
C2	Capacity to manage, organize and meet deadlines	
	Part D: Sustainability (1500 characters)	

D1	Level of staff support	
D2	Sustainability after grant monies exhausted	
	Part E: Underrepresented Groups	
E1	Reach and work to support underrepresented groups	
	Part F: Budget	
F1	Connections between budget details and project activities	

Rubric

.A. Project Need

Points awarded	0-2 point (Does Not Meet Expectations)	3-6 Points (Competitive)	7-10 Points (Highly Competitive)
	The statement of need is not clear and there is no supporting data.	The statement of need is clear but there is no supporting data.	Statement of need is clear, compelling, and supported by recent, valid, and targeted data.
	There is no reason supplied as to why the area of focus was selected.	There is a reason for the area of focus selection but it is not clear how it addresses the needs outlined in the project plan.	The description of why this area of focus was selected and how the proposed activities address the needs outlined in the project plan are clear and concise.

B. Project Steps to Prepare

Points awarded	0-2 point (Does Not Meet Expectations)	3-6 Points (Competitive)	7-10 Points (Highly Competitive)
	CS/CT has not been identified as a district need.	CS/CT has been identified as a need but not part of the district's continuous improvement process.	CS/CT has been identified as a district need at the Administrative level by including it in the district's continuous improvement process.

No discussion to begin work or grade level/content area not chosen.	content areas to begin work	Discussions of grade levels AND content area to begin work have been identified. (Timeline)
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C. Project Capacity

Points awarded	0-1 point (Does Not Meet Expectations)	2-3 Points (Competitive)	4-5 Points (Highly Competitive)
	Little to no identification of staff and their roles within the plan.	Staff has been identified, but roles are not clear within the project plan.	Staff roles are identified within the project plan.
	The project plan does not demonstrate or imply how the work will be managed, organized and that deadlines will be met.	The project plan implies how the work will be managed, organized and has few deadlines.	The project plan demonstrates the capacity of the entity applying for the funds to manage the project, organize the work, and meet the deadlines.

D. Project Sustainability

Points awarded	0-1 point (Does Not Meet Expectations)	2-3 Points (Competitive)	4-5 Points (Highly Competitive)
	A Communication pathway to staff and community has not been identified.	A Communication pathway to staff and community has been identified with few details.	A Communication pathway to staff and community has been identified with clear details.
	No mention of how the work/program will continue without grant funding.	A plan is outlined for sustaining the program and/or building on the intended program outcomes after the grant fund expires, but the plan is more hopeful than viable.	A viable plan is outlined for sustaining the program and/or building on the intended program outcomes after the grant funding expires.

E. Project Underrepresented Groups

Application does not clearly identify or address underrepresented groups.	Application identifies groups but lacks detail as to how they will be engaged.	Application explicitly identifies and addresses the needs of groups that are underrepresented in identified curricular areas.
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F. Budget

Points awarded	0 points (Does Not Meet Expectations)	1 Point (Competitive)	2 Point (Highly Competitive)
	There is no budget detail. Budget exceeds potential award amounts.	Budget has detail but does not make a direct correlation to activities identified in the project plan.	**Reviewers can clearly make the connection between the activities listed in the worksheet and the budget page in NexSys.

^{**}Project Budget: Please be sure to describe in the Budget Detail area, the specific use of funds and where they connect to support your work.

Other application considerations

Locale

City (Large, Midsize, Small)
Suburb (Large, Midsize, Small)
Town (Fringe, Distant, Remote)
Rural (Fringe, Distant, Remote)

Funding and Reporting Information

Grant Number: Coming soon

Payment Schedule

Grantees will request funds using NexSys. Requests for funds are limited to reimbursement. Funds should be expended by September 30, 2025.

Indirect Charges

There is no administrative cost allowed for State Aid Funds unless explicitly included in the Act.

Financial Reporting

A final expenditure report (FER) will be required within 60 days of the grant ending date, showing all bills paid in full in Nexsys.

Reporting

A grantee that receives funding under this section shall submit a report to the department by June 30, 2025. The report must include all of the following:

- The number of teachers prepared.
- Students reached, including the number and percentage of students reached, disaggregated by gender, race, ethnicity, and socioeconomic status.
- The number and percentage of students with passing AP exam scores for high school AP courses, by gender, race, and ethnicity, once that data is available.
- The number of teachers that started implementing computer science compared to the number of prepared teachers that attended professional learning.
- The number of elementary students who are provided integrated computer science opportunities (during the school day).
- Progress in building a systematic K to 12 computer science plan using the SCRIPT rubric.
- Any data from pre- and post-assessments that measure teacher readiness for teaching and/or integrating computational thinking or computer science that was created by a national education non-profit organization.

Monitoring Visits

All subgrantees are subject to onsite or virtual grant review from state or federal auditors. Recipients must maintain and make available, in the event of a monitoring visit, evidence and documentation to support all expenditures.

Questions

Questions regarding the Implementing the Effective Use of Technology Competitive Grant Application in NexSys should be directed to the MDE, Office of Systems, Evaluation, and Technology (OSET); mde-edtech@michigan.gov.

Assurances

Program Assurances - Computer Science/Computational Thinking

The district assures that all information within the work plan is true and accurate to the best of their knowledge. They assure that they will meet the following program assurances:

- Agree to participate in a district <u>CSforALL SCRIPT workshop</u> that will develop a district computer science vision and actionable goals toward the implementation of a computer science education pathway that provides computer science for all students.
- Agree to complete a district gap analysis using the <u>Computer Science District Maturity</u> Model.
- Implement the K-12 computer science education pathway according to the vision and actionable goals developed in the SCRIPT workshop.
- Ensure that the district shall begin offering the courses or content within the same or next school year after the teacher receives the professional learning.
- Contribute knowledge and experiences as a mentor/coach role for districts beginning to engage in computer science and computational thinking implementation.
- Participate in any surveys, interviews, and data collection processes sent out by the MDE for the purpose of evaluating the use of the project funding toward district computer science implementation.
- Agree to provide pre-assessments and post-assessments of teacher readiness for teaching computational thinking and computer science and any data related to those assessments.

STATE OF MICHIGAN GRANTS — ASSURANCES AND CERTIFICATIONS

GRANT AWARD LIMITATIONS

State program grant allocations and awards are based on available legislative appropriations for specific grant programs. The state legislature has the prerogative to make changes in the state budget during the fiscal year. Final grant awards are contingent upon the MDE receiving sufficient state funding to award grants under the program. Not all projects will be fully funded when the total of applicant funding requests exceeds available state funds.

ASSURANCE REGARDING SANCTIONS AGAINST IRAN-LINKED BUSINESSES

The applicant assures that, for any request for proposals or contract renewal for work performed under this grant, it will collect a certification from each bidder that the bidder is not an Iran-Linked Business. An Iran-linked business is not eligible to submit a bid on a request for proposal with a public entity. Recipients must comply with all conditions under P.A. 517 of 2012, "Iran Economic Sanction Act," April 1, 2013.

ASSURANCE CONCERNING MATERIALS DEVELOPED WITH FUNDS AWARDED UNDER THIS GRANT

The grantee assures that the following statement will be included on any publication or project materials developed with funds awarded under this program, including reports, films, brochures, and flyers: "These materials were developed under a grant awarded by the Michigan Department of Education." All materials created with funds awarded for this grant must also be licensed with a Creative Commons license of CC-BY, CC-BY-SA, CC-BY-NC, or CC-BY-SA-NC. See Creative Commons licensing at https://creativecommons.org/licenses/by/4.0/deed.en.

<u>CERTIFICATION REGARDING NONDISCRIMINATION UNDER FEDERALLY AND STATE</u> <u>ASSISTED PROGRAMS</u>

The grantee hereby agrees that it will comply with all federal and Michigan laws and regulations prohibiting discrimination and, in accordance therewith, no person, on the basis of race, color, religion, national origin or ancestry, age, sex, marital status or handicap, shall be discriminated against, excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education or the Michigan Department of Education.

CERTIFICATION REGARDING TITLE II OF THE AMERICANS WITH DISABILITIES ACT (ADA), P.L. 101-336, STATE AND LOCAL GOVERNMENT SERVICES

The Americans with Disabilities Act (ADA) provides comprehensive civil rights protections for individuals with disabilities. Title II of the ADA covers programs, activities, and services of public entities. Title II requires that, "No qualified individual with a disability shall, by reason of such disability be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by such entity." In accordance with Title II ADA provisions, the applicant has conducted a review of its employment and program/service delivery processes and has developed solutions to correcting barriers identified in the review.

CERTIFICATION REGARDING TITLE III OF THE AMERICANS WITH DISABILITIES ACT (ADA), P.L. 101-336, PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES

The Americans with Disabilities Act (ADA) provides comprehensive civil rights protections for individuals with disabilities. Title III of the ADA covers public accommodations (private entities

that affect commerce, such as museums, libraries, private schools and day care centers) and only addresses existing facilities and readily achievable barrier removal. In accordance with Title III provisions, the applicant has taken the necessary action to ensure that individuals with a disability are provided full and equal access to the goods, services, facilities, privileges, advantages, or accommodations offered by the applicant. In addition, a Title III entity, upon receiving a grant from the Michigan Department of Education, is required to meet the higher standards (i.e., program accessibility standards) as set forth in Title III of the ADA for the program or service for which they receive a grant.

ASSURANCE REGARDING COMPLIANCE WITH GRANT PROGRAM REQUIREMENTS

Grantee agrees to comply with all applicable requirements of all state statutes, federal laws, executive orders, regulations, policies, and award conditions governing this program. Grantee understands and agrees that if it materially fails to comply with the terms and conditions of the grant award, the Michigan Department of Education may withhold funds otherwise due to the grantee from this grant program, any other federal grant programs or the State School Aid Act of 1979 as amended, until the grantee comes into compliance or the matter has been adjudicated and the amount disallowed has been recaptured (forfeited). The Department may withhold up to 100 percent of any payment based on a monitoring finding, audit finding or pending final report.

<u>CERTIFICATION REGARDING NONDISCRIMINATION UNDER FEDERALLY AND STATE</u> ASSISTED PROGRAMS

The applicant hereby agrees that it will comply with all federal and Michigan laws and regulations prohibiting discrimination and, in accordance therewith, no person, on the basis of race, color, religion, national origin or ancestry, age, sex, marital status or handicap, shall be discriminated against, excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education or the Michigan Department of Education.

Other Helpful Documents/Resources

NexSys Title IV Instructions document

99b Technical Assistance Slide Deck

Recording of Title IV Technical Assistance Webinar (coming soon)

Grant FAQs

Working Template for District Project Plan

Example Application